



During compilation of a project's source code, it is normal to encounter some types of errors. The author explains two useful plug-ins provided by Eclipse. One helps solve NoClassDefFound errors while the other allows log files to be monitored for changes

# JARClassFinder and Log Watcher — Eclipse Plug-ins

— Raja R.K

Eclipse is one of the most widely used IDE for Java-based application development. Its extensibility in the form of plug-ins is a key factor to its popularity among developers across the globe. In this article, we shall study two useful Eclipse plug-ins - JARClassFinder and LogWatcher

Eclipse is available as an Open Source tool. You can download the latest version from <http://www.eclipse.org/downloads/index.php>.

## JARClassFinder

When you compile your project source code, the probability of you may encountering NoClassDefFound exceptions is high. You get this exception because your project build path is missing the required JAR file containing the class that you referenced in your code. Locating the correct JAR file is the only solution to

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Language	Java
Platform	Java
Level	Intermediate

solve this issue. IBM has developed an Eclipse plug-in called JARClassFinder as a solution to the NoClassDefFound issue. You can get the latest version of JARClassFinder Eclipse plug-in from <http://www.alphaworks.ibm.com/tech/jarclassfinder/download>.

Installing JARClassFinder is fairly straightforward. First, extract the downloaded zip file on to your system hard disk. Copy com.ibm.wpst.hursley.jarclassfinder\_2.0.3 under plugins to your Eclipse plug-ins directory and restart Eclipse.

If everything goes well, you will now see a new icon in the Eclipse tool bar.

Now let us see how this JARClassFinder eclipse plug-in helps us solve the NoClassDefFound errors.

Create a new Java project with a source file, shown in figure 1.

Fig 1: Eclipse showing a Project with Class Not Found error

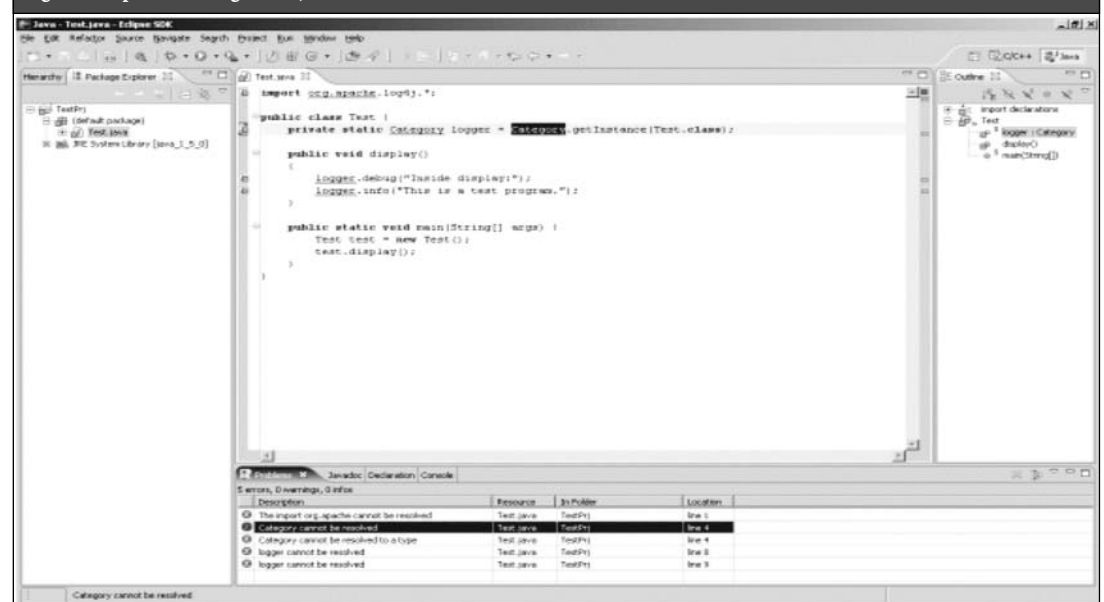
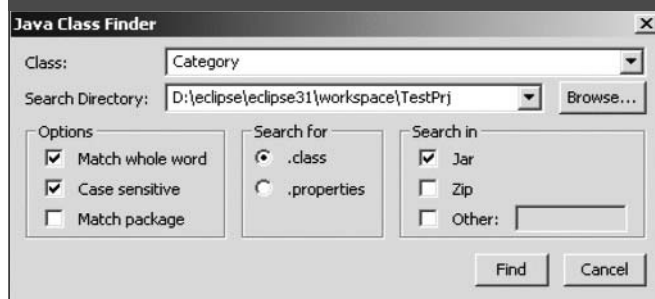


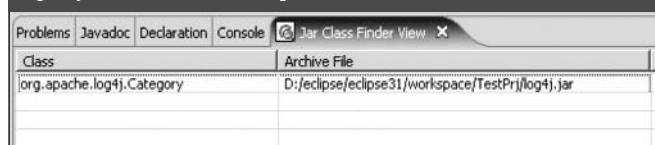
Fig 2: JARClassFinder Plug-in Window



In figure 1, you can see that we have used the log4 classes but have not included the log4j JAR file in the project build path. To include the JAR file in the build path, we need to first locate the JAR file. To find the JAR file, click the JARClassFinder icon and enter the class name and search directory details. See figure 2.

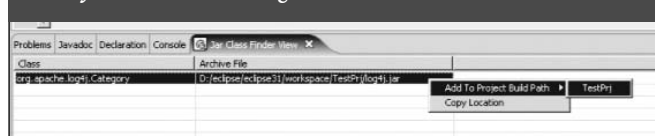
Click on Find button to locate the JAR file. You will see a new view for JARClassFinder listing the class file and corresponding JAR file location in Eclipse. Refer figure 3.

Fig 3: JARClassFinder Eclipse View



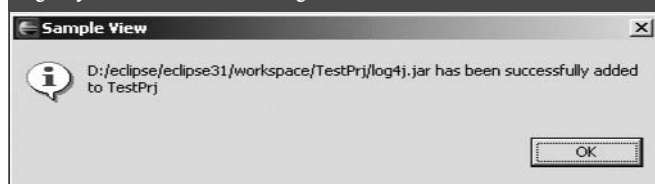
To add JAR file to the project build path, right click on the JARClassFinder view result and select 'Add To Project Build Path' menu. Refer figure 4.

Fig 4: Adding JAR file to Project Build Path using JARClassFinder Plug-in



Once everything goes well, you can see the success message from JARClassFinder plugin (figure 5). Figure 6 shows the successful addition of log4j JAR file in the Project build path.

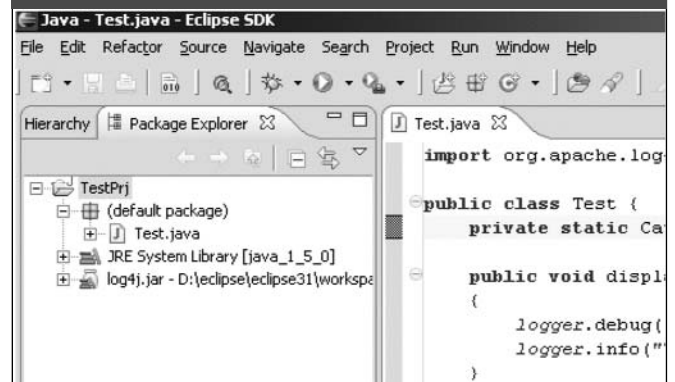
Fig 5: JARClassFinder Dialog



### LogWatcher

If you have worked on Unix platform, you will be aware of the 'tail'

Fig 6: Eclipse showing log4j in Project Build Path



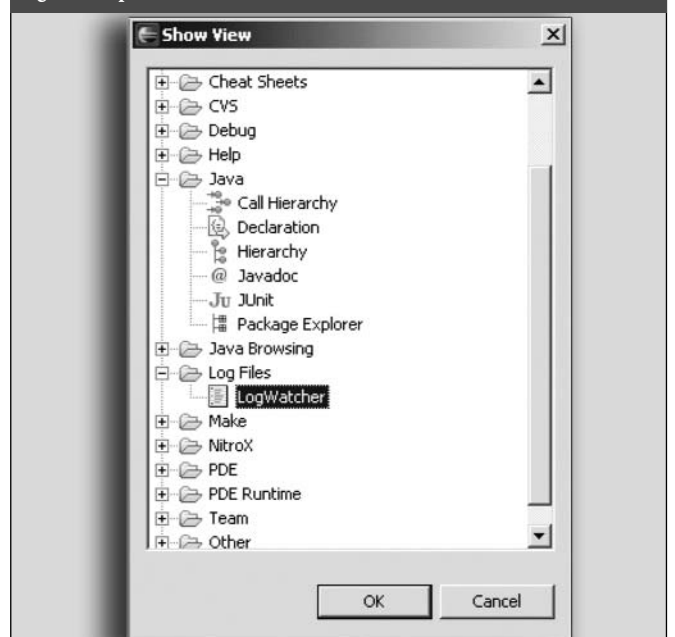
utility. One of the most frequently and widely used option with the tail command is '-f'. This option instructs the tail utility to reload the file and continue showing if it is modified. This helps users to view the log files in real-time as they get updated by programs.

LogWatcher adds a view to Eclipse that allows log files to be monitored for changes, similar to the Unix tail utility. It is available as an Eclipse plug-in from <http://sourceforge.net/projects/graysky>.

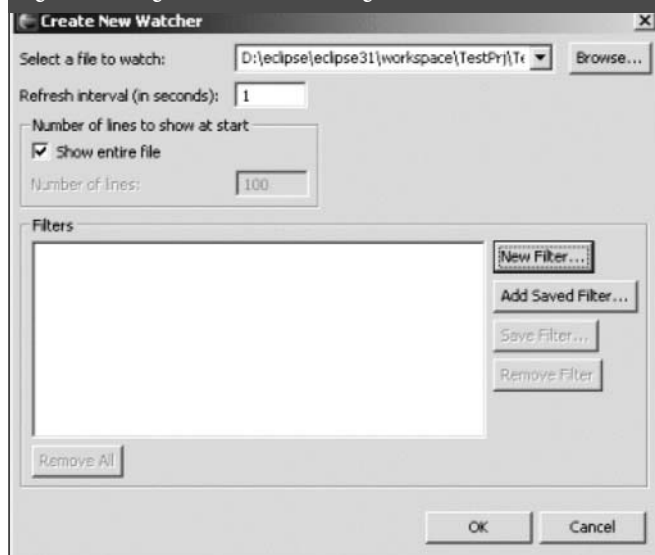
Installing the LogWatcher plug-in is also fairly simple. Extract the downloaded zip file on to your system hard disk and copy the org.graysky.eclipse.logwatcher\_1.4.0.1 to your Eclipse plug-ins directory and restart Eclipse.

To get the LogWatcher view, select LogWatcher under Log Files in Show View window (figure 7).

Fig 7: Eclipse Show View Window



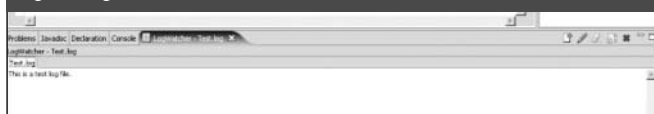
### Fig 8: Creating New Watcher Dialog



For creating a new watcher, click the 'Create a new watcher' icon in the LogWatcher view and enter the log file details, as in **figure 8**.

Figure 9 illustrates the LogWatcher view showing the log file content in real-time.

### Fig 9: LogWatcher View



So you now know how simple it is to solve the NoClassDefFound error using JARClassFinder and view log files for changes in real-time using the LogWatcher eclipse plug-ins! Happy and easier programming!!! **DIQ**

## References:

**Eclipse: [www.eclipse.org](http://www.eclipse.org).**

**JARClassFinder:**  
**[www.alphaworks.ibm.com](http://www.alphaworks.ibm.com)**

**LogWatcher:**  
**[www.sourceforge.net](http://www.sourceforge.net).**



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## CA presents Customer VIP Awards at NIKU 2005 Global User Conference



Computer Associates International Inc. announced the recipients of its 2005 Clarity VIP Awards, presented last month at the Niku 2005 Global User Conference. The VIP Awards honor customers successfully leveraging CA's Clarity IT Governance solution (formerly from Niku) to drive exceptional value across their organizations.

Clarity customers First Consulting Group (FCG), Armstrong World Industries and HSBC were conferred the VIP Awards, each representing an area of excellence in IT Governance and Vision, Impact and Progress, respectively.

"CA is proud to recognize our customers for their successful IT governance strategies, as well as for their use of Clarity in adjacent areas such as new product development," said Josh Pickus, senior vice president of CA's Clarity Division, Business Service Optimization (BSO). "The winners serve as excellent examples of how a commitment to aligning IT more closely with the overall objectives of the business creates a more responsive and productive enterprise."

## Vision Award

In recognition of its vision and demonstrated success in bringing IT governance to hosted healthcare outsourcing, the Vision Award was presented to First Consulting Group (FCG - [www.fcg.com](http://www.fcg.com)), a leading provider of outsourcing, consulting and system implementation and integration services to the healthcare sector. FCG initially deployed Clarity in early 2004, using it to provide visibility, management and control over its internal IT operations. Since then, FCG has extended its IT governance strategy, leveraging the solution in its outsourcing business to balance supply, demand and available resources. Clarity is also being used to more effectively manage client expectations, budget, processes, projects and programs. Today, FCG runs Clarity at several large healthcare customer sites with plans to bring additional outsourcing clients and the company's consulting division on board in 2006, further driving IT-business alignment throughout the enterprise.

## Impact Award

The Impact Award, presented to Armstrong World Industries ([www.armstrong.com](http://www.armstrong.com)), recognizes tangible results from a Clarity implementation, especially in terms of financial benefits, quality improvements and customer satisfaction. A global leader in the design and manufacture of floors, ceilings and cabinets, Armstrong has deployed Clarity as an enterprise application across a variety of areas, including IT governance, infrastructure services and applications development, new product development, corporate process improvement, corporate compliance and e-marketing. Armstrong has taken advantage of the solution to standardize key processes, streamline collaboration, more effectively allocate resources and operate more efficiently overall. Armstrong has driven significant tangible results, including reducing the average new product development life cycle and reacting faster to customer demands.

### Progress Award

Banking and financial services provider HSBC ([www.hsbc.com](http://www.hsbc.com)) has been honored with the Progress Award for outstanding planning and communication in implementing the Clarity solution. As part of an organization-wide effort underpinning the company's global project methodologies, standards and resource planning initiatives, HSBC has rolled out Clarity to 1,000-2,000 users per month, bringing 18,000 users across the globe onboard to date. The company plans to have more than 20,000 users up and running by the end of the year.